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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,161	09/15/2003	Arnold Stamler	50325-0819	2828

29989 7590 09/11/2007

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EXAMINER	
GOODCHILD, WILLIAM J	

ART UNIT	PAPER NUMBER
2145	

MAIL DATE	DELIVERY MODE
09/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Interview Summary	Application No.	Applicant(s)	
	10/663,161	STAMLER ET AL.	
	Examiner	Art Unit	
	William J. Goodchild	2145	

All participants (applicant, applicant's representative, PTO personnel):

(1) *William J. Goodchild (Examiner)*. (3) *Chris Tanner*.

(2) *Jason Cardone (SPE)*. (4)_____.

Date of Interview: *05 September 2007*.

Type: a)☒ Telephonic b)☐ Video Conference
c)☐ Personal [copy given to: 1)☐ applicant 2)☐ applicant's representative]

Exhibit shown or demonstration conducted: d)☐ Yes e)☒ No.
If Yes, brief description: _____.

Claim(s) discussed: *1*.

Identification of prior art discussed: *Mittal et al. (US Patent No. 7,076,645), Baskey et al., ((US Patent No. 6,148,410)*.

Agreement with respect to the claims f)☐ was reached. g)☒ was not reached. h)☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: *Applicant's argument regarding cliam 1, that the proposed amendment to claim 1 relating to the definition of a cluster, containing a first switch device, a plurality of activer routers, one or more standby routers, and a second switch device, should overcome the 102 rejection by Baskey et al. and Mittal et al., will be taken into consideration when the written argument is received*.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

JASON CARDONE
SUPERVISORY PATENT EXAMINER

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Examiner's signature, if required

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)
In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

DRAFT

1. (presently amended) A method of providing a single console control point for a network device cluster, ~~wherein the cluster comprises a first switch device, a plurality of active routers, one or more standby routers, and a second switch device, the method~~ comprising the computer-implemented steps of:

receiving user input specifying an operation to perform on the cluster as a whole; and

automatically performing the specified operation on one or more of the active routers in the cluster by transforming the specified operation into one or more device-specific operations for each of the one or more active routers;

wherein the user input specifies a configuration command for the cluster;

automatically communicating the configuration command to each of the active routers in the plurality of active routers;

further wherein the cluster comprises a first switch device, a plurality of active routers, one or more standby routers, and a second switch device.

2. (canceled) The method as recited in Claim 1, wherein the receiving step comprises receiving user input specifying a configuration command for the cluster; and wherein the performing step comprises automatically communicating the configuration command to each of the active routers in the plurality of active routers.

3. (previously presented) The method as recited in Claim 2, further comprising the steps of:

subscribing a management process to an event bus;

subscribing each of the active routers to the event bus; and

publishing the configuration command in an event on the event bus.

4. (previously presented) The method as recited in Claim 3, further comprising the steps performed at each of the active routers of:

receiving the event;

extracting the configuration command from the event; and

presenting the configuration command to a native console.

5. (previously presented) The method as recited in Claim 2, wherein the configuration command is a configuration load command

6. (previously presented) The method as recited in Claim 2, wherein the configuration command is a configuration execution command.

7. (previously presented) The method as recited in Claim 2, wherein the user input is received in a graphical user interface, and further comprising the step of displaying an execution log for the configuration command within the same graphical user interface in which the user input is received.

8. (original) A method of providing a single console control point for a network device cluster, wherein the cluster comprises a first switch device, a stack consisting of one or more active routers and one or more standby routers, and a second switch device, the method comprising the computer-implemented steps of:

receiving first user input requesting an operational overview of the cluster; and

generating and displaying an operational overview of the cluster, wherein the operational overview comprises a status indicator, connection information, failed device information, and a first access icon for accessing information about the stack.

9. (previously presented) The method as recited in Claim 8, further comprising the steps of:

receiving second user input that selects the first access icon;

generating and displaying a device operational overview for devices in the cluster, wherein the device operational overview comprises, for each router in the stack of the cluster, a device status indicator, device connection information, failed connection information, and a

second access icon for accessing information about connections of the first and second switch devices and the stack

10. (previously presented) The method as recited in Claim 9, further comprising the steps of:

receiving third user input that selects the second access icon;

generating and displaying a connection operational overview for connections of the cluster, wherein the connection operational overview comprises, for each connection of the stack, a connection status indicator and one or more values of attributes associated with the connection.

11. (previously presented) A method of providing a single console control point for a network device cluster, the method comprising the computer-implemented steps of:

receiving first user input in a user interface (UI) that identifies a first switch device and a second switch device for the cluster;

receiving second user input in the UI that identifies a plurality of network elements for a router stack of the cluster;

receiving third user input in the UI that defines at least one first connection of the first switch device in association with at least one network element in the stack, and at least one second connection of the second switch device in association with the at least one network element in the stack; and

associating the first, second, and third user input in a cluster object that programmatically represents the cluster.

12. (previously presented) The method as recited in Claim 11, further comprising the steps of:

receiving information specifying that a network element in the cluster has failed;

based on the cluster object, selecting a substitute network element from among one or more available network elements from the router stack;

receiving connection configuration information from the identified network element; and

based on the connection configuration information, re-configuring the substitute network element and the first and second switch devices associated with the identified network element, wherein the re-configuring causes the first and second switch devices to change one or more connections from the identified network element to the substitute network element.

13. (previously presented) The method as recited in Claim 12, wherein the step of re-configuring the substitute network element and the one or more switch devices associated with the identified network element further comprises the steps of:

creating one or more sets of commands to configure the one or more switch devices; and

publishing a configuration load event that includes the commands and that targets only the one or more switch devices associated with the identified and substitute network elements.

14. (previously presented) The method as recited in Claim 13, wherein the step of re-configuring the substitute network element and the one or more switch devices associated with the identified network element further comprises the steps of:

in response to the configuration load event, each of the one or more switch devices connecting to a cluster manager and receiving a particular set of commands;

at each of the one or more switch devices, processing the particular set of commands, wherein processing includes causing the one or more switch devices to change the one or more connections from the identified network element to the substitute network element; and

at each of the one or more switch devices, publishing a configuration complete event to acknowledge completing the processing of the particular set of commands

15. (previously presented) The method as recited in Claim 11, wherein the third user input includes information defining a set of commands used to reconfigure at least one switch device from the plurality of switch devices.

16. (previously presented) The method as recited in Claim 11, wherein the first, second and third user inputs are stored persistently at a cluster manager; and wherein each of the

switch devices and the plurality of network elements persistently stores startup configuration information, but does not store the first, second and third user inputs.

17. (previously presented) The method as recited in Claim 11, wherein the second user input comprises information identifying one or more network elements from the plurality of network elements as back-up network elements.

18. (previously presented) The method as recited in Claim 11, wherein the second user input comprises information identifying one or more network elements from the plurality of network elements as stand-by network elements.

19. (previously presented) The method as recited in Claim 11, further comprising the step of receiving a fourth user input in the UI that modifies information received in the second and third user inputs.

20. (previously presented) The method as recited in Claim 11, further comprising the step of receiving a fourth user input in the UI that identifies the at least one network element as removed from the plurality of network elements.

21. (previously presented) The method as recited in Claim 11, further comprising the step of receiving a fourth user input in the UI that disassociates at least one switch device with at least one network element from the plurality of network elements.

22. (previously presented) The method as recited in Claim 11, wherein the first, second, and third user inputs define a logical stack object, wherein the logical stack object is identified by a stack name and represents a logical grouping of at least two switch devices and at least one network element.

23. (previously presented) The method as recited in Claim 22, further comprising the step of receiving a fourth user input in the UI that requests sending a command to all switch devices and all network elements represented by the logical stack object.

24. (original) A user interface (UI) located at a user device for use in providing a single console control point for a network device cluster, comprising:

an input mechanism for receiving user input, wherein the user input includes:

a first user input that identifies a plurality of switch devices in a logical stack object that represents the network device cluster;

a second user input that identifies a plurality of network elements in the network device cluster; and

a third user input that associates at least one switch device from the plurality of switch devices with at least one network element from the plurality of network elements; and

an execute mechanism for causing re-provisioning of real network elements that are represented by the logical stack object.

25. (previously presented) The user interface as recited in Claim 24, wherein the execute mechanism comprises instructions which, when executed by a processor, cause the processor to perform the steps of:

identifying a network element that has failed;

selecting a substitute network element from among one or more available network elements from the plurality of network elements;

receiving connection configuration information from the identified network element; and

based on the connection configuration information, re-configuring the substitute network element and the one or more switch devices associated with the identified network element, wherein the re-configuring causes the one or more switch devices to change one or more connections from the identified network element to the substitute network element.

26. (original) An apparatus for providing a single console control point for a network device cluster, wherein the cluster comprises a first switch device, a plurality of active routers, one or more standby routers, and a second switch device, the apparatus comprising:

means for receiving user input specifying an operation to perform on the cluster as a whole; and

means for automatically performing the specified operation on one or more of the active routers in the cluster by transforming the specified operation into one or more device-specific operations for each of the one or more active routers.

27. (previously presented) The apparatus of Claim 26, wherein the receiving step comprises receiving user input specifying a configuration command for the cluster; and wherein the performing step comprises automatically communicating the configuration command to each of the active routers in the plurality of active routers.

28. (previously presented) The apparatus of Claim 27, further comprising:

means for subscribing a management process to an event bus;

means for subscribing each of the active routers to the event bus; and

means for publishing the configuration command in an event on the event bus.

29. (previously presented) The apparatus of Claim 28, further comprising:

means for receiving the event;

means for extracting the configuration command from the event; and

means for presenting the configuration command to a native console.

30. (previously presented) The apparatus of Claim 27, wherein the configuration command is a configuration load command

31. (previously presented) The apparatus of Claim 27, wherein the configuration command is a configuration execution command.

32. (previously presented) The apparatus of Claim 27, wherein the user input is received in a graphical user interface, and further comprising means for displaying an execution log for the configuration command within the same graphical user interface in which the user input is received.

33. (previously presented) A mechanism for providing a single console control point for a network device cluster, wherein the cluster comprises a first switch device, a plurality of active routers, one or more standby routers, and a second switch device;

wherein the mechanism receives user input specifying an operation to perform on the cluster as a whole; and automatically performs the specified operation on one or more of the active routers in the cluster by transforming the specified operation into one or more device-specific operations for each of the one or more active routers.

34. (previously presented) The mechanism of Claim 33, further comprising:

a graphical user interface suitable for receiving user input; and

a displayable execution log within the graphical user interface, capable of displaying a configuration command.

PTOL-413A (09-04)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Applicant Initiated Interview Request Form

Application No.: 10/663,161 First Named Applicant: Arnold Stamler
Examiner: William J. Goodchild Art Unit: 2145 Status of Application: after final
Tentative Participants:
(1) Chris Tanner (2) Examiner Goodchild
(3) Primary/SPE (4) _____
Proposed Date of Interview: ASAP **Proposed Time:** _____ **(AM/PM)**
Type of Interview Requested:
(1) [X] Telephonic (2) [ ] Personal (3) [ ] Video Conference
Exhibit To Be Shown or Demonstrated: [ ] YES [X] NO
If yes, provide brief description: _____

Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) Rej	1	Baskey	[ ]	[ ]	[ ]
(2) Rej	1	HP	[ ]	[ ]	[ ]
(3) Rej	1	Mittal	[ ]	[ ]	[ ]
(4)			[ ]	[ ]	[ ]

[ ] Continuation Sheet Attached

Brief Description of Arguments to be Presented:
Claim 1 not shown/suggested by any combination of Baskey, HP, and/or Mittal

An interview was conducted on the above-identified application on _____.
NOTE: This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).
This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.

/christophermarktanner41518/ _____
Applicant/Applicant's Representative Signature Examiner/SPE Signature

Chris Tanner
Typed/Printed Name of Applicant or Representative

41,518
Registration Number, if applicable

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.